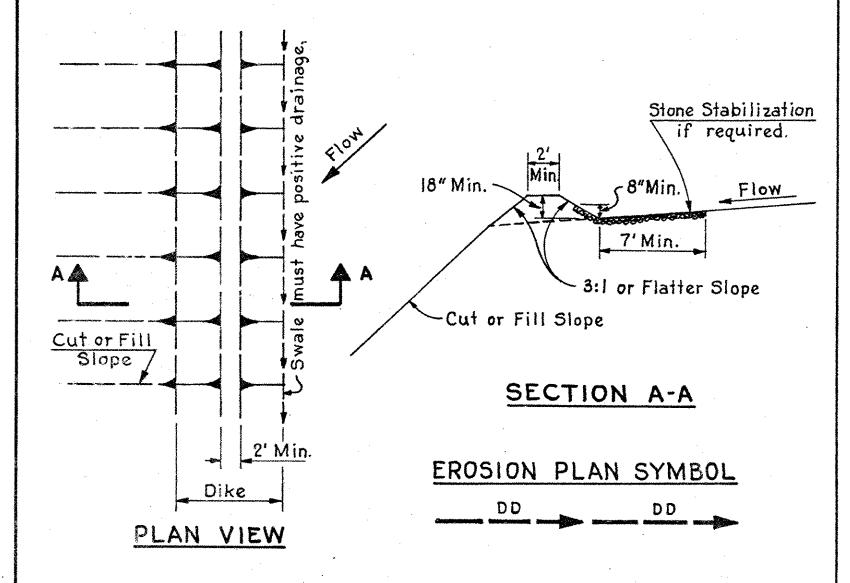
TEMPORARY DIVERSION DIKE

(DRAINAGE AREAS LESS THAN 5 ACRES)

A ridge of compacted soil with a general life expectancy of one year or less, constructed immediately above a cut or fill slope, that intercepts storm runoff from higher areas and diverts it away from exposed slopes to a stabilized outlet. Used to prevent excessive erosion until the permanent storm drainage features are installed and the slopes are stabilized.



NOTES:

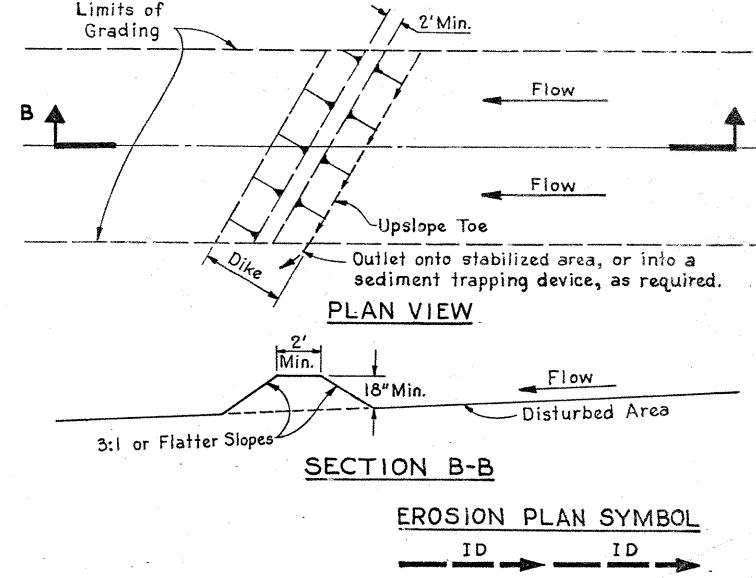
THE PRINT

- 1. All dikes shall be machine compacted.
- 2. The swale formed by the upslope toe of the dike must have positive drainage (minimum of 0.25% grade) to the outlet. This design does not apply when the grade of the swale is greater than 10% (maximum grade).
- 3. Where the slope of the swale is less than 2%, stabilization may not be required, but should be added if periodic inspection deems necessary. When the slope is from 2% to 5% the channel (flow area) should be stabilized; using Section 725, "Erosion Control, Excelsior Blanket, Net or Jute Mesh"; Section 725, "Chemical Erosion Control"; or "Stone Stabilization". Where the slope of the swale is greater than 5%; "Stone Stabilization", consisting of stone that meets Delaware Standard Gradation Size Nº 103 which is placed in a 3 inch thick layer and pressed into the soil, shall be used. The area to be stabilized by the stone shall be as shown by Section A-A above.
- 4. Runoff diverted from a protected or stabilized area shall outlet directly to an undisturbed stabilized area, into a level spreader, or to a grade stabilization structure. Runoff diverted from a disturbed or unstable upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin, or to an area that is protected by any of these practices.
- 5. Diversion dikes must be protected with Section 725, "Erosion Control, Seeding I" or Section 725, "Erosion Control, Seeding II" applied immediately after construction.
- 6. Periodic inspection and required maintenance shall be provided.

TEMPORARY INTERCEPTOR DIKE

(DRAINAGE AREAS LESS THAN 5 ACRES)

A ridge of compacted soil or gravel, to remain for a period of usually less than one year, constructed across disturbed rights of way and similar sloping areas. Used to shorten the length of exposed slopes thereby reducing the potential for erosion by intercepting the storm runoff and diverting it to stabilized outlets until permanent stabilization of the slopes is established.



NOTES:

- I. All dikes shall be machine compacted.
- 2. All interceptor dikes must have positive drainage to an outlet. The grade of the swale, formed at the upslope toe of the dike, shall be from 0.5% to 1.0%.
- 3. The top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic. The area of the construction crossing shall be stabilized using "Stone Stabilization", consisting of stone that meets Delaware Standard Gradation Size Nº 103, which is placed in two seperate layers each three inches thick. Each layer is compacted into the soil after placement.
- 4. The spacing of the interceptor dikes along the graded slope shall be as follows:
- Maximum slope of area above dike >10% 5 to 10% < 5%

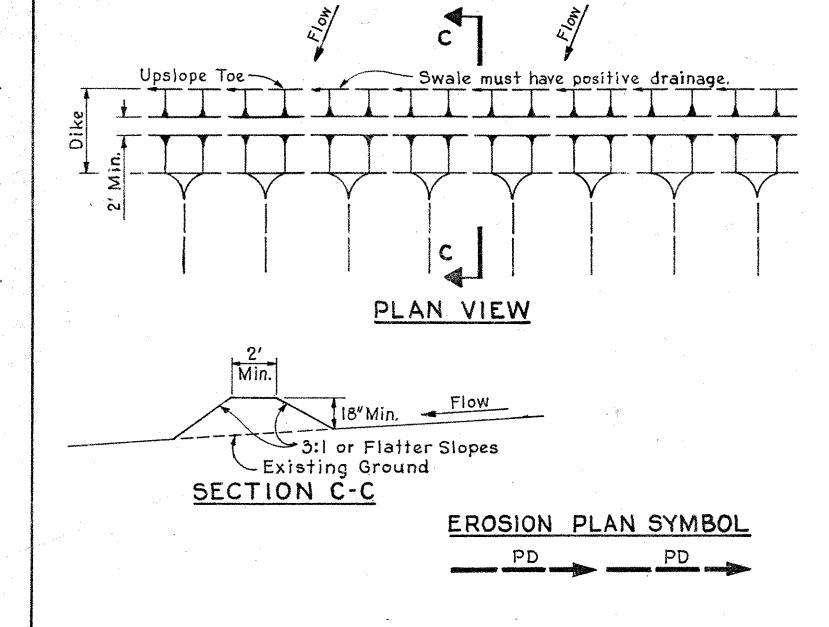
 Distance between interceptor dikes 100 Feet 200 Feet 300 Feet

 The field location may be adjusted as needed in order to utilize a stabilized safe outlet.
- 5. Interceptor dikes must have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin, when either the interceptor dike swale or the drainage area above the dike are not adequately stabilized.
- 6. When it is deemed necessary by the periodic inspections, the flow area of the swale shall be stabilized using "Stone Stabilization", which consist of a three inch thick layer of stone (Delaware Standard Gradation Size Nº 103) that is pressed into the soil. The area to be covered by the stone shall be as shown by Section A-A for Temporary Diversion Dikes
- 7. Section 725, Erosion Control, Seeding I or Seeding II shall be applied immediately after construction to protect the dike from erosion.
- 8. Periodic inspection and required maintenance shall be provided.

TEMPORARY PERIMETER DIKE

(DRAINAGE AREAS LESS THAN 5 ACRES)

A ridge of compacted soil, life expectancy of one year or less, constructed at the perimeter of the site or disturbed area that is used to divert sediment laden storm runoff to an on-site trapping facility or to divert runoff from a stabilized upland area away from the construction area. These dikes shall remain in place until the construction site is permanently stabilized.



NOTES:

- I. All dikes shall be machine compacted.
- 2. The grade of the swale formed at the upslope toe of the dike is dependent upon the topography, but must have positive drainage to an outlet. This design should not be used when the grade for the swale will be greater than 10% (maximum grade).
- 3. When the slope of the swale is less than 2%, stabilization may not be required; however, it should be added where periodic inspection deems necessary. When the slope is 2% or greater, stabilization shall be required. See Note 3 for Temporary Diversion Dike for details. The minimum area to be stabilized shall be the swale flow area.
- 4. Runoff diverted from a protected or stabilized area shall outlet directly to an undisturbed stabilized area, into a level spreader, or to a grade stabilization structure. Runoff diverted from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment basin, sediment trap, or gravel outlet structure.
- 5. The dikes must be located far enough away from the disturbed area to permit machine regrading and cleanout.
- 6. Section 725, Erosion Control, Seeding I or Seeding II shall be applied immediately following construction to protect the dike.
- 7. Periodic inspection and required maintenance shall be provided.

APPROVED:
DATE:

DEPARTMENT OF TRANSPORTATION

STANDARD SHEET NUMBER EC-1

EROSION CONTROL DETAILS
TEMPORARY DIKES

RECOMMENDED:
DATE:

DEPUTY DIRECTOR
OF HIGHWAYS

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

STANDARD SHEET NUMBER EC-1

EROSION CONTROL DETAILS
TEMPORARY DIKES

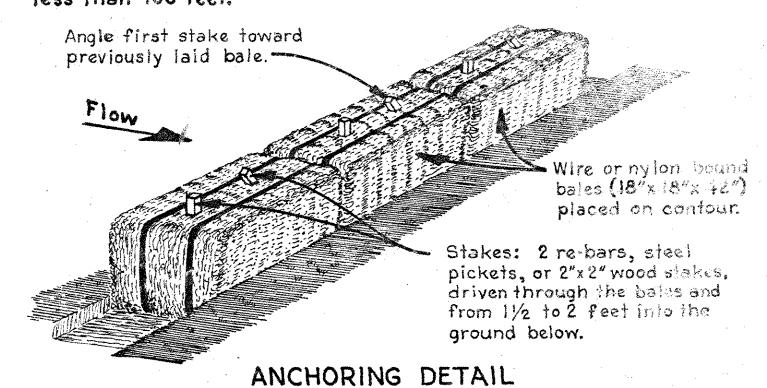
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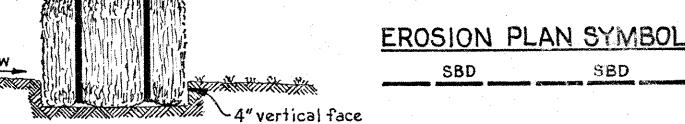
DEPUTY DIRECTOR
OF HIGHWAYS

TEMPORARY STRAW (or HAY) BALE DIKE

(DRAINAGE AREAS LESS THAN 1/2 ACRE)

A barrier installed across, or at the toe of a slope, that is used to intercept and detain small amounts of sediment from unprotected areas of less than one-half (1/2) acre. Straw bales must not be used an high sediment producing areas, above "high risk" areas, where we have centrated in a channel, or where there is a possibility and asshout. They may be used where erosion would normally only in the length of the slope above the length of the slope abo





EMBEDDING DETAIL

NOTES:

- 1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
- 2. Each bale shall be embedded in the soil a minimum of 4.
- 3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
- 4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
- 5. Bales shall be removed when they have served their usefulness in order to prevent the blocking or impeding of storm flow or drainage.